

## **Scott County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 10/13/14

13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Scott County economy. 1

These 13 sectors have a total direct output of approximately \$676 million and support 623.0 jobs in Scott County. Running the model for all 13 sectors simultaneously produces the following results:

Aquiquitura Contribution in Scott Co									
Impact Type <sup>2</sup>	Agriculture Contribution in Scott Co  mpact Type <sup>2</sup>   Employment   %   Total Value   % of Gross   Output <sup>5</sup>   % of Gross								
		Employment	Added <sup>3</sup>	Regional Product <sup>4</sup>		Regional Product			
Direct Effect	623.0	19%	161,727,812.9	48%	675,664,045.2	200%			
Indirect Effect	347.4	11%	37,639,749.3	11%	62,801,363.0	19%			
Induced Effect	309.4	10%	20,925,123.8	6%	34,099,301.5	10%			
Total Effect	1,279.8	40%	220,292,686.0	65%	772,564,709.7	229%			

As shown in the above table, agriculture, food, and food processing supports 1,279.8 jobs, or 40% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$773 million, roughly 229% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately \$220 million, or 65% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 65% of the total economy.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="http://www.implan.com/index.php?option=com">http://www.implan.com/index.php?option=com</a> content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

In the top ten by employment, Cattle ranching and farming is the top employer in the agriculture industry with 234.0 employees. This table also shows the amount of jobs that are created by the agriculture industry in Scott County.

Description	Total Employment	Total Output
Cattle ranching and farming	234.0	421,469,352.9
Animal production, except cattle and poultry and eggs	167.9	97,830,464.1
Grain farming	160.3	107,161,475.7
Real estate establishments	70.6	9,229,568.9
Monetary authorities and depository credit intermediation activities	65.7	21,605,321.9
Wholesale trade businesses	50.4	9,490,000.9
Food services and drinking places	49.8	2,593,687.2
Private hospitals	38.0	4,738,580.5
Support activities for agriculture and forestry	29.3	22,222.5
Transport by truck	28.8	3,667,551.9

The Cattle ranching and farming industry directly contributes approximately \$421 million to Scott County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Description	Total Employment	Total Output
Cattle ranching and farming	234.0	421,469,352.9
Grain farming	160.3	107,161,475.7
Animal production, except cattle and poultry and eggs	167.9	97,830,464.1
Soybean and other oilseed processing	12.2	24,518,268.8
Monetary authorities and depository credit intermediation activities	65.7	21,605,321.9
Wholesale trade businesses	50.4	9,490,000.9
Real estate establishments	70.6	9,229,568.9
Fertilizer manufacturing	6.1	9,116,087.5
Electric power generation, transmission, and distribution	12.0	8,462,839.3
Imputed rental activity for owner-occupied dwellings	0.0	7,967,501.3

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Scott County's economy.

Description	Employment	Output
Oilseed farming	0.85	1,548,579.69
Grain farming	160.30	105,732,948.30
All other crop farming	0.45	1,862,611.17
Cattle ranching and farming	234.03	415,840,148.93
Dairy cattle and milk production	0.38	876,780.27
Animal production, except cattle and poultry and eggs	167.90	96,523,826.60
Support activities for agriculture and forestry	29.32	21,323.85
Other animal food manufacturing	4.74	6,762,969.02
Flour milling and malt manufacturing	1.55	2,081,767.56
Soybean and other oilseed processing	12.17	24,503,398.90
Animal (except poultry) slaughtering, rendering, and processing	3.73	1,126,154.78
Soft drink and ice manufacturing	1.52	1,063,072.44
Fertilizer manufacturing	6.06	8,806,877.14

All 105 counties in Kansas have Implan models and agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.